



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

JUN 27 2011

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

REPLY TO THE ATTENTION OF:

Douglas J. Weber, Attorney  
FirstEnergy Corporation  
76 South Main Street  
Akron, Ohio 44308

RE: Notice and Finding of Violation issued to FirstEnergy

Dear Mr. Weber:

The U. S. Environmental Protection Agency is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to FirstEnergy Corporation (FirstEnergy). This NOV/FOV is issued in accordance with Section 113(a) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a).

EPA has determined that FirstEnergy and/or its subsidiaries are violating visible emissions provisions contained in Ohio Administrative Code (OAC) 3745-17-07(A) of the Ohio State Implementation Plan (Ohio SIP), 40 C.F.R. Part 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, and the Operating Permit requirements under Title V of the Act, 42 U.S.C. §§ 7661 – 7661e at its Eastlake, Lake Shore, Bay Shore, and Ashtabula generating stations. EPA discovered these violations after reviewing Continuous Opacity Monitors (COMS) data from these facilities submitted by FirstEnergy to Ohio Environmental Protection Agency (Ohio EPA).

EPA is offering you an opportunity to confer with us about the violations cited in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violations, and the steps you will take to bring the facilities into compliance. Please plan for your technical and management personnel to attend the conference to discuss compliance measures and commitments.

The EPA contact in this matter is Ethan Chatfield. You may call him at (312) 886-5112, to request a conference. You should make your request for a conference no later than 10 calendar days after you receive this letter, and we should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Cheryl L. Newton", is written over the typed name and title.

Cheryl L. Newton  
Director

Air and Radiation Division

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

**IN THE MATTER OF:**

**FirstEnergy Corporation  
Akron, Ohio .**

**Proceedings Pursuant to  
Section 113(a)(1) and (a)(3) of the  
Clean Air Act,  
42 U.S.C. §7413(a)(1) and (a)(3)**

**EPA-5-11-OH-08**

**NOTICE OF VIOLATION AND FINDING OF VIOLATION**

The U.S. Environmental Protection Agency (EPA) is issuing this Notice of Violation and Finding of Violation (Notice) under Section 113(a) of the Clean Air Act, 42 U.S.C. § 7413(a). The authority to issue this NOV/FOV has been delegated to the Regional Administrator of the U.S. Environmental Protection Agency Region 5, and redelegated to the Director, Air and Radiation Division.

EPA finds that the FirstEnergy Corporation (FirstEnergy) and/or its subsidiaries are violating the Clean Air Act (Act), 42 U.S.C. §§ 7401 *et seq.*, at its Eastlake, Lake Shore, Bay Shore and Ashtabula generating stations.

**STATUTORY AND REGULATORY BACKGROUND**

**Ohio State Implementation Plan (SIP) - Opacity**

1. EPA approved OAC Chapter 3745-17-07(A)(1) as part of the federally enforceable Ohio SIP on June 27, 1994. 59 *Fed. Reg.* 27464.
2. OAC 3745-17-07(A)(1)(a) requires that "visible particulate emissions from any stack shall not exceed twenty percent opacity, as a six-minute average."
3. OAC 3745-17-07(A)(1)(b) states that "visible particulate emissions from any stack may exceed twenty percent opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed sixty percent opacity, as a six-minute average, at any time."
4. EPA approved OAC Chapter 3745-15 as part of the federally enforceable Ohio SIP on November 1, 1982. 47 *Fed. Reg.* 43377. OAC Rule 3745-15 regulates general

provisions, including but not limited to malfunctions at stationary sources, scheduled maintenance, and reporting.

5. OAC Rule 3745-15(B) requires that in the event that any emission source, air pollution control equipment, or related facility breaks down in such a manner as to cause the emission of air contaminants in violation of any applicable law, the person responsible for such equipment shall immediately notify the Ohio Environmental Protection Agency (Ohio EPA) district office or delegate agency of such failure or breakdown.

### **Title V Requirements**

6. EPA promulgated full approval of the Ohio's Title V program on August 15, 1995. 40 C.F.R. Part 70, Appendix A; 60 *Fed. Reg.* 42045. Ohio's Title V program became effective on October 1, 1995. 60 *Fed. Reg.* 42045.

7. The Ohio regulations governing the Title V permitting program are codified at OAC 3745-77, and are federally enforceable pursuant to Section 113(a)(3).

8. OAC 3745-77-07(A) provides that the Title V permit "shall include emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at time of issuance."

9. Ohio EPA issued Title V permits P0085103, P0094243, P0088525, and P0084050 for the Eastlake, Lake Shore, Bay Shore and Ashtabula generating stations, respectively.

10. The Title V permit for each coal-fired boiler contains an applicable emission limitation/control measure that states "visible particulate emissions shall not exceed 20% opacity as a 6-minute average." [OAC rule 3745-17-07(A)]

11. The Title V permit for each coal-fired boiler contains an applicable requirement that states that FirstEnergy "shall operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions...Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 C.F.R. Part 60.13".

12. The Title V permit for each coal-fired boiler provides that with the exception of system breakdowns, repairs, calibration checks, and zero and span adjustments required, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements.

### **New Source Performance Standards (NSPS)**

13. Section 111(e) of the CAA, 42 U.S.C. § 7411(e), states that, after the effective date of standards of performance promulgated under Section 111, it is unlawful for any owner or operator of any new source to operate the source in violation of any applicable standard of performance.

14. 40 C.F.R. § 60.40 Da et seq., Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, establishes, among other things, emission limitations, monitoring, and reporting requirements for particulate matter and opacity.

15. Bayshore Unit B006 is subject to the requirement of NSPS Subpart Da.

16. 40 C.F.R. § 60.13(e) provides that with the exception of system breakdowns, repairs, calibration checks, and zero and span adjustments required, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements.

### **FACTUAL BACKGROUND**

17. FirstEnergy Corporation and its subsidiaries are incorporated in Ohio.

18. FirstEnergy Corporation and its subsidiaries are each a "person", as that term is defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).

19. The Eastlake generating station is a fossil fuel-fired electric utility steam generating station located in Lake County, Ohio and has the potential to emit more than 100 tons per year each of NO<sub>x</sub>, SO<sub>2</sub>, and PM. The Plant consists of five coal-fired boilers. Units 1 through 3 are identical tangentially-fired boilers which commenced operation in or around 1952/3 and are each connected to an approximately 132 MW turbine generator. Unit 4 is a tangentially-fired boiler which commenced operation in or around 1956 and is connected to an approximately 240 MW turbine generator. Unit 5 is a cell burner boiler which commenced operation in or around 1972 and is connected to an approximately 597 MW turbine generator.

20. The Lake Shore generating station is a fossil fuel-fired electric utility steam generating station located in Cuyahoga County, Ohio and has the potential to emit more than 100 tons per year each of NO<sub>x</sub>, SO<sub>2</sub>, and PM. The Lake Shore plant consists of one remaining operational coal-fired unit. Unit 18 is a tangentially-fired boiler which commenced operation in or around 1962 and is connected to an approximately 245 MW turbine generator.

21. The Bay Shore generating station is a fossil fuel-fired electric utility steam generating station located in Lucas County, Ohio and has the potential to emit more than 100 tons per year each of NO<sub>x</sub>, SO<sub>2</sub>, and PM. The Bay Shore plant consists of four operating coal-fired units. Unit 1 has a circulating fluidized bed petcoke and coal fired boiler which began operation in 2000. Unit 2 is a dry-bottom vertically-fired coal boiler which began operation in 1959 and is connected to a 138 MW turbine. Unit 3 is a dry bottom horizontally-fired coal boiler which began operation in 1963 and is connected to a 142 MW turbine. Unit 4 is a dry bottom horizontally-fired coal boiler which began operation in 1968 and is connected to a 215 MW turbine.

22. The Ashtabula generating station is a fossil fuel-fired electric utility steam generating station located in Ashtabula County, Ohio and has the potential to emit more than 100 tons per year each of NO<sub>x</sub>, SO<sub>2</sub>, and PM. The Ashtabula plant consists of one operating coal-fired unit. Unit 5 is a tangentially-fired coal boiler constructed in early 1958 and is connected to a 244 MW turbines.

23. Based upon review of Quarterly Deviation Reports and continuous opacity monitoring system (COMS) data submitted to Ohio EPA by FirstEnergy for the Eastlake, Lakeshore, Bay Shore, and Ashtabula generating stations for the time periods listed below, FirstEnergy reported continuous opacity monitor (COM) downtime exceedences and exceedences of the 20 percent, 6-minute average opacity limitation, as summarized in Tables 1 through 8 below.

**Table 1: Minutes of Exceedences of Opacity Limit at Eastlake Station:**

Quarter/Year	Stack #1	Stack #2	Stack #3	Stack #4	Stack #5
4th Q. 2008	978	120	144	540	606
1st Q. 2009	18	97	378	561	522
2nd Q. 2009	-	6	16	414	438
3rd Q. 2009	-	42	24	18	630
4th Q. 2009	24	6	36	12	138
1st Q. 2010	-	18	24	54	402
2nd Q. 2010	36	12	6	624	564
3rd Q. 2010	-	18	18	978	876
4th Q. 2010	84	6	24	210	330

**Table 2: Minutes of COMS Downtime at Eastlake Station:**

Quarter/Year	Stack #1	Stack #2	Stack #3	Stack #4	Stack #5
4th Q. 2008	240	300	300	180	210
1st Q. 2009	294	162	18	72	360
2nd Q. 2009	252	462	204	432	990
3rd Q. 2009	540	120	300	300	276
4th Q. 2009	180	180	18	156	6
1st Q. 2010	1,320	300	480	540	300
2nd Q. 2010	366	144	366	1,386	324
3rd Q. 2010	420	1,320	420	780	624
4th Q. 2010	204	648	648	372	192

**Table 3: Minutes of Exceedences of Opacity Limit for Lake Shore Station:**

Quarter/Year	Stack #1
4th Q. 2008	978
1st Q. 2009	1,476
2nd Q. 2009	240
3rd Q. 2009	132

4th Q. 2009	120
1st Q. 2010	330
2nd Q. 2010	138
3rd Q. 2010	1,164
4th Q. 2010	636

**Table 4: Minutes of COMS Downtime at Lake Shore Station:**

Quarter/Year	Stack #1
4th Q. 2008	2,616
1st Q. 2009	558
2nd Q. 2009	360
3rd Q. 2009	456
4th Q. 2009	120
1st Q. 2010	504
2nd Q. 2010	192
3rd Q. 2010	90
4th Q. 2010	120

**Table 5: Minutes of Exceedences of Opacity Limit for Bay Shore Station:**

Quarter/Year	Units 2-4
4th Q. 2008	1,326
1st Q. 2009	1,698
2nd Q. 2009	1,470
3rd Q. 2009	918
4th Q. 2009	1,296
1st Q. 2010	1,254
2nd Q. 2010	1,188
3rd Q. 2010	786
4th Q. 2010	384

**Table 6: Minutes of COMS Downtime at Bay Shore Station:**

Quarter/Year	Unit 1	Units 2-4
4th Q. 2008	540	1,110
1st Q. 2009	612	432
2nd Q. 2009	354	1,422
3rd Q. 2009	588	996
4th Q. 2009	840	528
1st Q. 2010	606	492
2nd Q. 2010	468	2,502
3rd Q. 2010	1,242	186
4th Q. 2010	510	252

**Table 7: Minutes of Exceedences of Opacity Limit for Ashtabula Station:**

<b>Quarter/Year</b>	<b>Stack #1</b>
4th Q. 2008	1,170
1st Q. 2009	66
2nd Q. 2009	66
3rd Q. 2009	30
4th Q. 2009	24
1st Q. 2010	42
2nd Q. 2010	66
3rd Q. 2010	30
4th Q. 2010	36

**Table 8: Minutes of COMS Downtime at Ashtabula Station:**

<b>Quarter/Year</b>	<b>Stack #1</b>
4th Q. 2008	24
1st Q. 2009	12
2nd Q. 2009	-
3rd Q. 2009	-
4th Q. 2009	-
1st Q. 2010	1,320
2nd Q. 2010	30
3rd Q. 2010	6
4th Q. 2010	180

## **VIOLATIONS**

24. Tables 1 through 8, above, identify the number of minutes of emissions in excess of the 20%, 6-minute average limitation submitted by FirstEnergy to the Ohio Environmental Protection Agency for FirstEnergy's Eastlake, Lakeshore, Bay Shore and Ashtabula generating stations.

25. FirstEnergy violated its Title V permits and Ohio SIP requirements at the Eastlake, Lake Shore, Bay Shore, and Ashtabula generating stations by exceeding the 20%, 6-minute average opacity limitation.

26. Tables 1 through 8, above, identify the number of minutes FirstEnergy failed to continuously operate its COMS in violation of 40 C.F.R. §60.13(e), based on reports submitted by FirstEnergy to the Ohio Environmental Protection Agency for FirstEnergy's Eastlake, Lakeshore, Bay Shore and Ashtabula generating stations.

27. FirstEnergy violated the Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, 40 C.F.R. Part 60, Subpart Da, at its Bayshore Unit B006 by failing to continuously operate its COMS at all times during facility operation.

28. FirstEnergy violated its Title V permits for the Eastlake, Lake Shore, Bay Shore, and Ashtabula generating stations by failing to continuously operate COMS at all times during facility operation.

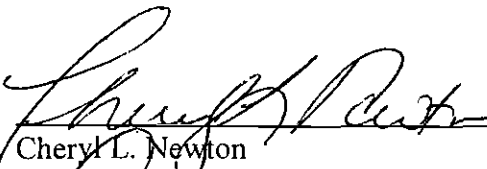
29. FirstEnergy violated the Ohio SIP at OAC 3745-15(B) by failing to immediately notify Ohio EPA of each failure or breakdown causing the emission of air contaminants in violation of limits contained in its Title V permit.

#### **ENVIRONMENTAL IMPACT OF VIOLATIONS**

30. Violations of the particulate matter standards and control requirements increase public exposure to unhealthy particulate matter. Particulate matter, especially fine particulate, contributes to respiratory problems, lung damage and premature deaths.

Dated

6/27/11

  
Cheryl L. Newton  
Director  
Air and Radiation Division



## CERTIFICATE OF MAILING

I, Tracy Jamison, certify that I sent a Notice of Violation and Finding of Violation, No. **EPA-5-11-OH-08**, by Certified Mail, Return Receipt Requested, to:

Douglas J. Weber, Attorney  
FirstEnergy Corporation  
76 South Main Street  
Akron, Ohio 44308

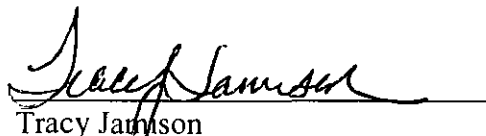
I also certify that I sent copies of the Notice of Violation and Finding of Violation by first class mail to:

Bob Reffner, Vice-President, Legal  
First Energy Corporation  
76 South Main Street  
Akron, Ohio 44308

Michael Horvath, P.E., Director  
FirstEnergy Corporation  
Environmental Projects  
76 South Main Street  
Akron, Ohio 44308

Robert Hodanbosi, Chief  
Division of Air Pollution Control  
Ohio Environmental Protection Agency  
P.O. Box 1049  
Columbus, Ohio 43138

On the 28 day of June, 2011

  
Tracy Jamison  
Administrative Professional Assistant  
Planning and Administration Section

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7670 4526